

Populus tremuloides - (*Populus grandidentata*) Rocky Woodland (Mixed Aspen Rocky Woodland)

COMMON NAME	Trembling Aspen - (Bigtooth Aspen) Rocky Woodland
SYNONYM	Mixed Aspen Rocky Woodland
PHYSIOGNOMIC CLASS	Woodland (II)
PHYSIOGNOMIC SUBCLASS	Deciduous woodland (II.B)
PHYSIOGNOMIC GROUP	Cold-deciduous woodland (II.B.2)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (II.B.2.N)
FORMATION	Cold-deciduous woodland (II.B.2.N.a)
ALLIANCE	POPULUS TREMULOIDES WOODLAND ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 3

USFWS WETLAND SYSTEM TERRESTRIAL

RANGE

Voyageurs National Park

This type occurs in localized upland areas throughout the park.

Globally

This association is found in northern Michigan, northern Minnesota, Manitoba, and probably Ontario.

ENVIRONMENTAL DESCRIPTION

Voyageurs National Park

This community occurs on bedrock ridges with shallow soils. Soils range from non-existent on bedrock openings to 8-12 cm loams or sandy loams in low areas where soil has developed. Slopes are generally gentle (1-10%) with variable aspects. Exposed bedrock ranges from 5-20%. These sites are rapidly drained.

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MOST ABUNDANT SPECIES

Voyageurs National Park

Stratum

Tree canopy
Tree sub-canopy
Tall shrub
Short shrub
Forb
Fern
Graminoid
Nonvascular

Species

Populus tremuloides, *Betula papyrifera* *Populus grandidentata*
Abies balsamea, *Betula papyrifera*
Corylus cornuta, *Acer rubrum*, *Populus tremuloides*
Vaccinium spp.
Aster macrophyllus, *Aralia nudicaulis*
Pteridium aquilinum
Schizachne purpurascens
Pleurozium schreberi, *Cladina* spp.

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CHARACTERISTIC SPECIES

Voyageurs National Park

Populus tremuloides, *Populus grandidentata*, *Betula papyrifera*, *Vaccinium* spp., *Schizachne purpurascens*, *Pleurozium schreberi*, *Cladina* spp.

Globally

Populus tremuloides, *Populus grandidentata*, *Betula papyrifera*, *Vaccinium* spp., *Schizachne purpurascens*, *Pleurozium schreberi*, *Cladina* spp.

VEGETATION DESCRIPTION

Voyageurs National Park

The canopy of this type usually consists of a mix of *Populus tremuloides*, *Betula papyrifera* and, occasionally, *Populus grandidentata*. Percent cover ranges from 20-60%. There is often a subcanopy (usually about 30% cover) containing the species in the canopy as well as *Abies balsamea*, *Acer rubrum* and, less commonly, *Quercus ellipsoidalis*. In the patches of soil that exist between the bedrock outcrops, vegetation can be more forest-like. These areas contain a short shrub layer of *Corylus cornuta* and *Populus* spp., with cover ranging from 20-90%. The herb layer in these patches consists of *Aralia nudicaulis*, *Pteridium aquilinum*, and *Aster macrophyllus* with cover typically in the 60-70% range. The bedrock outcrops often contain a low cover of *Vaccinium* spp. The herb layer associated with bedrock typically contains *Woodsia ilvensis*, *Schizachne purpurascens*, and *Agropyron trachycaulum*, with cover usually low (less than 25%). These bedrock areas may also contain a low cover of *Pleurozium schreberi*, *Cladina rangiferina*, *Cladina mitis*, and *Cladina stellaris*.

Globally

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CONSERVATION RANK G?.

DATABASE CODE Cegl002487

COMMENTS

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Diagnostic features of the type are the canopy of *Populus tremuloides*, *Populus grandidentata*, and/or *Betula papyrifera*, with less than 60% cover and canopy closure prevented by the presence of exposed bedrock. When canopy cover is greater than 60% and canopy closure is not prevented by the presence of exposed bedrock, the community is considered an Aspen-Birch/Boreal Conifer Forest (CEGL002466). Some stands intermediate between these two communities exist. Vegetation indicative of exposed bedrock conditions should be present for the stand to be considered a Mixed Aspen Rocky Woodland. If woodland physiognomy is evident and the canopy is a mixture of aspen/birch and other conifers, this type can grade into Northern Pin Oak-Bur Oak-(Jack Pine) Rocky Woodland (CEGL005246), but that type has at least 20% oaks in the canopy.

Globally

This type may originate after fires or logging, and many stands may not have a natural origin.

REFERENCES